Alkalinity

Themeasure of the ability of a solution to neutralize acids to the equivalance of a carbonate

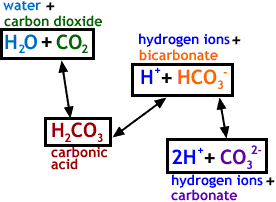
Why its important: Alkalinity acts as a buffer in the water - a safety net

Alkalinity of natural water is determined  by the soil and bedrock through which it passes. The main sources for natural alkalinity are rocks which contain carbonate, bicarbonate, and hydroxide compounds.

Alkalinity is important for fish and aquatic life because it protects or buffers against rapid pH changes. Living organisms, especially aquatic life, function best in a pH range of 6.0 to 9.0. Alkalinity is a measure of how much acid can be added to a liquid without causing a large change in pH.

Acid shock may occur in spring when acid snows melt, thunderstorms, natural discharges of tannic waters, "acid rain", acidic dryfall, and other discharges enter the stream.

The bicarbonate buffering system works in stream ecosystems much in the same way as it does in your blood stream.



Streams with a pH of 6 or lower have very little buffering capacity.